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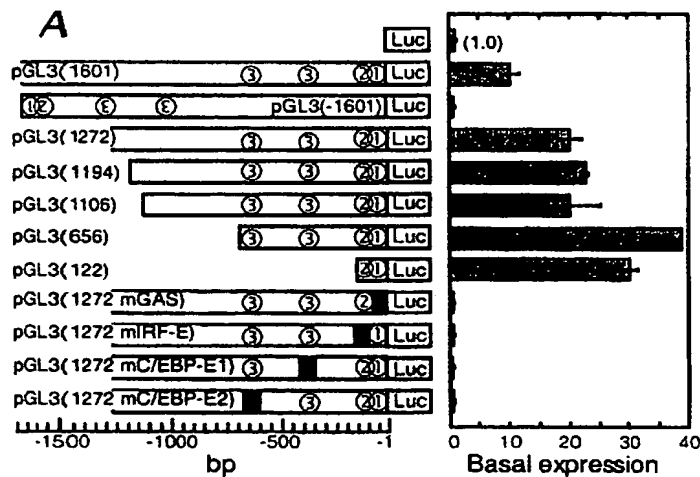
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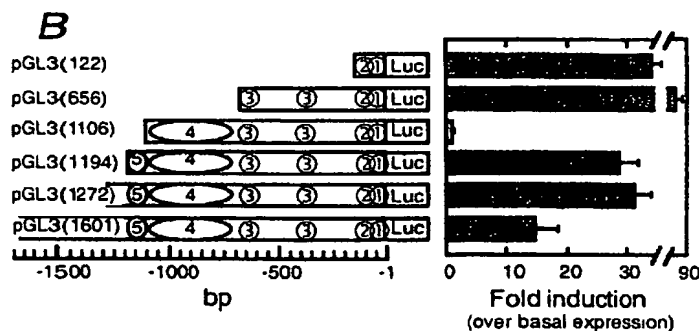
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*[Continued on next page]*

- (54) Title: PROMOTER TO IL-18BP, ITS PREPARATION AND USE**



**(57) Abstract:** The present invention relates to the promoter of interleukin-18 binding protein (IL-18BP), to its preparation and use.





ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
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## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07K14/715

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBL, WPI Data, SEQUENCE SEARCH, EMBASE, MEDLINE, BIOSIS

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 09063 A (RUBINSTEIN MENACHEM ;KIM SOO HYUN (IL); NOVICK DANIELA (IL); YEDA) 25 February 1999 (1999-02-25) the whole document --- -/--	1-34

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NOVICK D ET AL: "INTERLEUKIN-18 BINDING PROTEIN: A NOVEL MODULATOR OF THE TH1 CYTOKINE RESPONSE"  IMMUNITY, CELL PRESS, US, 'Online!  vol. 10, no. 1, January 1999 (1999-01),  pages 127-136, XP000973488  ISSN: 1074-7613  see figure 3 a  the whole document</p>	1-34
X	<p>&amp; DATABASE EMBL 'Online!  human, 3 March 1999 (1999-03-03)  NOVICK: "Interleukin 18 binding protein a novel modulator of the Th1 cytokine"  retrieved from EBI  Database accession no. AF110798  abstract</p>	1-34
X	<p>---  KIM S-H ET AL: "STRUCTURAL REQUIREMENTS OF SIX NATURALLY OCCURRING ISOFORMS OF THE IL-18 BINDING PROTEIN TO INHIBIT IL-18"  PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US,  vol. 97, no. 3,  1 February 2000 (2000-02-01), pages  1190-1195, XP000941910  ISSN: 0027-8424  the whole document</p>	1-34
X	<p>---  HURGIN VLADIMIR ET AL: "Transcriptional regulation of IL-18 binding protein gene expression"  JOURNAL OF INTERFERON AND CYTOKINE RESEARCH,  vol. 24, no. Supplement 1, 2001, page S.73  XP009027935  Annual Meeting of the International Society for Interferon and Cytokine Research;Cleveland,, OH, USA; October 07-11, 2001  ISSN: 1079-9907</p>	1-34
P,X	<p>---  DATABASE EMBL 'Online!  4 November 2002 (2002-11-04)  NOVICK: "IL18 binding protein"  retrieved from EBI  Database accession no. BD074754  XP002273651  abstract</p> <p>---  -/--</p>	1-34

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P,X	DATABASE EMBL 'Online! 4 November 2002 (2002-11-04) NOVICK: "IL18 binding protein" retrieved from EBI Database accession no. BD074752 XP002273652 abstract -----	1-34
P,X	HURGIN VLADIMIR ET AL: "The promoter of IL-18 binding protein: Activation by an IFN-gamma-induced complex of IFN regulatory factor 1 and CCAAT/enhancer binding protein beta." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES, vol. 99, no. 26, 24 December 2002 (2002-12-24), pages 16957-16962, XP002273756 December 24, 2002 ISSN: 0027-8424 (ISSN print) the whole document -----	1-34

# INTERNATIONAL SEARCH REPORT

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9909063	A	25-02-1999	AU 755794 B2	19-12-2002
			AU 8746098 A	08-03-1999
			BG 104149 A	31-08-2000
			BR 9811940 A	05-09-2000
			CA 2298855 A1	25-02-1999
			CN 1267307 T	20-09-2000
			DE 1003781 T1	11-01-2001
			EA 3675 B1	28-08-2003
			EE 200000073 A	16-10-2000
			EP 1003781 A1	31-05-2000
			ES 2149149 T1	01-11-2000
			HU 0003533 A2	29-01-2001
			WO 9909063 A1	25-02-1999
			JP 2001514876 T	18-09-2001
			NO 20000700 A	14-04-2000
			NZ 502392 A	20-12-2002
			PL 338647 A1	06-11-2000
			SK 1762000 A3	12-09-2000
			US 2004037829 A1	26-02-2004
			US 6605280 B1	12-08-2003
			ZA 9807310 A	14-08-2000